11-8-2008

Ex. 280-US-482

Unknown

Stream: Deming Creek
Site: 657
Date: 9/23/1990
Habitat: Run **Flow:** Low

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.90	105.90		100.00
HP1				
HP2				
HP3				
TP				
HP3				
HP2				
HP1				
BM				

Comment: No level loop due to no HPs.

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0.0	105.90	23.45	0.00	82.45	82.45	1.0
1-R				23.45	0.00	82.45		
2-L	8.2	8.6	105.90	23.11	0.00	82.79	82.69	
2-R	9			23.11	0.00	82.79		
3-L	11.4	12.3	105.90	22.95	0.00	82.95	82.95	0.7
3-R	13.2			22.95	0.00	82.95		
							Ave Q=	0.8

Note:
WSE slope = 4.065%

(3) Meter and propeller ID for Velocity Correction

Meter ID: NA
Propeller ID: NA

Date: 4/10/1991
Habitat: Run **Flow:** Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	1.96	101.96		100.00
HP1				
HP2				
HP3				
TP				
HP3				
HP2				
HP1				
BM				

Comment: No level loop due to no HPs.

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
HydrC-L	-10.1	-10.1	101.96	19.53	0.00	82.43	82.46	
HydrC-R	-10.1			19.47	0.00	82.49		
1-L	0	0	101.96	19.45	0.00	82.51	82.51	1.5
1-R	0			19.46	0.00	82.50		
2-L	8.2	8.6	101.96	19.21	0.00	82.75	82.74	1.7
2-R	9			19.24	0.00	82.72		
3-L	11.4	12.3	101.96	18.98	0.00	82.98	82.99	2.1
3-R	13.2			18.96	0.00	83.00		
							Ave Q=	1.8

Note:
WSE slope = 3.943%

(3) Meter and propeller ID for Velocity Correction

Meter ID: NA
Propeller ID: NA

Date: 5/18/1993
Habitat: Run **Flow:** High

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	0.22	100.22		100.00
HP1				
HP2				
HP3				
TP				
HP3				
HP2				
HP1				
BM				

Comment: No level loop due to no HPs.

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	100.22	16.72	0.00	83.50	83.46	
1-R	0			16.81	0.00	83.41		
2-L	8.2	8.6	100.22	16.67	0.00	83.55	83.59	26.9
2-R	9			16.60	0.00	83.62		
3-L	11.4	12.3	100.22	16.28	0.00	83.94	83.86	
3-R	13.2			16.45	0.00	83.77		
							Ave Q=	26.9

Note:
WSE slope = 3.252%

(3) Meter and propeller ID for Velocity Correction

Meter ID: NA
Propeller ID: NA

Ex. 280-US-482
Page 1 of 8

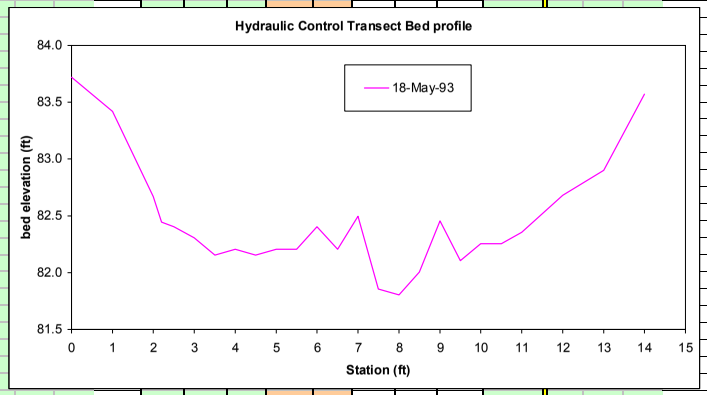
Stream:	Deming Creek	
Site:	657	
Transect:	HC	
Habitat:	Run	
Survey Date	HI (ft)	Q (cfs)
9/23/1990		
4/10/1991	101.96	
5/18/1993		

23-Sep-90

Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) $NV_{0.2/0.6}$	Vel (ft/s) $NV_{0.8}$	Vel (ft/s) Ave	Angle (deg)	q (cfs)	substrate

10-Apr-91

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) $NV_{0.2/0.6}$	Vel (ft/s) $NV_{0.8}$	Vel (ft/s) Ave	Angle (deg)	q (cfs)	substrate
LWP	0.0	18.24	83.72										
	1.0	18.54	83.42										
	2.0	19.29	82.67										
LEW	2.2		82.45	0.06								#####	
	2.5		82.41	0.10								#####	
	3.0		82.31	0.20								#####	
	3.5		82.16	0.35								#####	
	4.0		82.21	0.30								#####	
	4.5		82.16	0.35								#####	
	5.0		82.21	0.30								#####	
	5.5		82.21	0.30								#####	
	6.0		82.41	0.10								#####	
	6.5		82.21	0.30								#####	
	7.0		82.50	0.01								#####	
	7.5		81.86	0.65								#####	
	8.0		81.81	0.70								#####	
	8.5		82.01	0.50								#####	
	9.0		82.46	0.05								#####	
	9.5		82.11	0.40								#####	
	10.0		82.26	0.25								#####	
	10.5		82.26	0.25								#####	
REW	11.0		82.36	0.15								#####	
	12.0	19.28	82.68										
	13.0	19.06	82.90										
RWP	14.0	18.39	83.57										



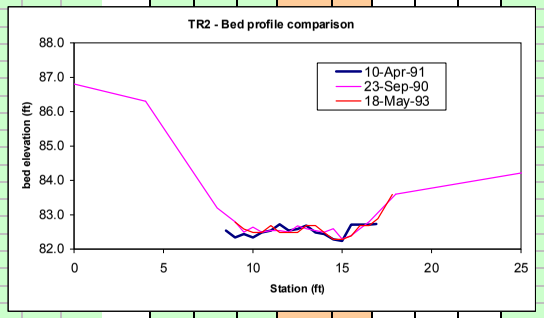
18-May-93

Sta (ft)	Adj (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) $NV_{0.2/0.6}$	Vel (ft/s) $NV_{0.8}$	Vel (ft/s) Ave	Angle (deg)	q (cfs)	substrate

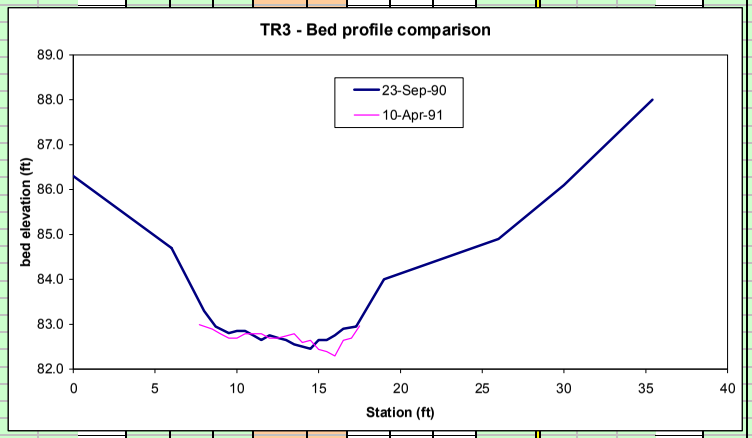
| Stream: | Deming Creek | | |

Stream:	Deming Creek		23-Sep-90														10-Apr-91														18-May-93													
Site:	657			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q	
Transect:	2			(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	
Habitat:	Run																																							
Survey	HI	Q																																						
Date	(ft)	(cfs)	LWP	0.0	19.10	86.80									1.1	LWP	0.0	14.94	87.02										LWP	0.0											
9/23/1990	105.90			4.0	19.60	86.30									1.1	LEW	8.5		82.54	0.20	0.00		0.00		0.00		0.00	7.6	LEW	9.0		82.79	0.80	0.29		0.29		0.29		0.06	7.7
4/10/1991	101.96	1.7		8.0	22.70	83.20									7.6		9.0		82.34	0.40	0.03		0.03		0.03		0.01	7.7		9.5		82.59	1.00	1.36		1.36		1.36		0.68	5.6
5/18/1993	100.22	26.9															9.5		82.44	0.30	1.03		1.03		1.03		0.15	5.6		10.0		82.49	1.10	2.58		2.58		2.58		1.42	6.6
			LWE	9.0	23.11	82.79	0.00	0.00		0.00		0.00		0.00	7.7		10.0		82.34	0.40	1.38		1.38		1.38		0.28	6.6		10.5		82.49	1.10	2.60		2.60		2.60		1.43	6.7
				9.5		82.49	0.20	1.04		1.04		1.04		0.05	5.6		10.5		82.49	0.25	-0.09		-0.09		-0.09		-0.01	6.7		11.0		82.69	0.90	2.02		2.02		2.02		0.91	6.7
				10.0		82.64	0.05							#####	6.6		11.0		82.54	0.20	1.53		1.53		1.53		0.15	6.7		11.5		82.49	1.10	2.21		2.21		2.21		1.22	6.7
				10.5		82.49	0.20	0.00		0.00		0.00		0.00	6.7		11.5		82.73	0.01	0.10		0.10		0.10		0.00	6.7		12.0		82.49	1.10	1.06		1.06		1.06		0.58	6.6
				11.0		82.54	0.15			0.00		0.00		0.00	6.7		12.0		82.54	0.20	1.48		1.48		1.48		0.15	6.6		12.5		82.49	1.10	3.50		3.50		3.50		1.93	6.6
				11.5		82.54	0.15							#####	6.7		12.5		82.59	0.15	2.10		2.10		2.10		0.16	6.6		13.0		82.69	0.90	5.16		5.16		5.16		2.32	6.6
				12.0		82.49	0.20							#####	6.6		13.0		82.69	0.05	1.00		1.00		1.00		0.03	6.6		13.5		82.69	0.90	2.15		2.15		2.15		0.97	6.7
				12.5		82.68	0.01							#####	6.6		13.5		82.49	0.25	0.44		0.44		0.44		0.06	6.7		14.0		82.49	1.10	1.20		1.20		1.20		0.66	6.6
				13.0		82.59	0.10							#####	6.6		14.0		82.44	0.30	0.38		0.38		0.38		0.06	6.6		14.5		82.29	1.30	4.94		4.94		4.94		3.21	6.6
				13.5		82.54	0.15							#####	6.7		14.5		82.29	0.45	1.24		1.24		1.24		0.28	6.6		15.0		82.29	1.30	6.21		6.21		6.21		4.04	6.6
				14.0		82.49	0.20							#####	6.6		15.0		82.24	0.50	1.50		1.50		1.50		0.38	6.6		15.5		82.39	1.20	5.07		5.07		5.07		3.04	6.6
				14.5		82.59	0.10							#####	6.6		15.5		82.72	0.02	0.10		0.10		0.10		0.00	6.6		16.0		82.69	0.90	5.40		5.40		5.40		2.43	6.5
				15.0		82.29	0.40							#####	6.6		16.0		82.72	0.02	0.00		0.00		0.00		0.00	6.5		16.5		82.69	0.90	3.96		3.96		3.96		1.78	6.5
				15.5		82.39	0.30							#####	6.6		16.5		82.72	0.02	0.10		0.10		0.10		0.00	6.5		17.0		82.89	0.70	0.49		0.49		0.49		0.22	6.5
				16.0		82.59	0.10							#####	6.5	REW	16.9		82.74	0.00	0.00		0.00		0.00		0.00	6.5	REW	17.8		83.59	0.00	0.00		0.00		0.00		0.00	6.5
			RWE	16.5	23.11	82.79	0.00							#####	6.5	RWP	35.8																							
				18.0	22.30	83.60									1.1																										
				26.0	21.60	84.30									1.1																										
			RWP	34.8	18.50	87.40									1.1																										
				39.0	9.70	96.20									1.1																										

Swoffer won't measure



Stream:	Deming Creek			23-Sep-90												10-Apr-91												18-May-93											
Site:	657			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q		Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q		Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q	
Transect:	3			(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate	(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate	(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate
Habitat:	Run																																					
Survey	HI	Q	LWP	0.0	19.60	86.30									1.1	LWP	0.0	15.20	86.76								1.1												
Date	(ft)	(cfs)		6.0	21.20	84.70									1.1	LEW	7.7		82.99	0.00	0.00		0.00		0.00		0.00	1.1											
9/23/1990	105.90	0.7		8.0	22.60	83.30									1.1		8.5		82.89	0.10	0.00		0.00		0.00		0.00	1.3											
4/10/1991	101.96	2.1	LWE	8.7	22.95	82.95	0.10	0.00		0.00		0.00		0.00	1.3		9.0		82.79	0.20	0.18		0.18		0.18		0.02	1.3											
5/18/1993	100.22			9.5		82.80	0.15	0.36		0.36		0.36		0.04	1.3		9.5		82.69	0.30	0.67		0.67		0.67		0.10	1.3											
				10.0		82.85	0.10	0.16		0.16		0.16		0.01	5.3		10.0		82.69	0.30	0.37		0.37		0.37		0.06	5.3											
				10.5		82.85	0.10	0.00		0.00		0.00		0.00	5.3		10.5		82.79	0.20	0.44		0.44		0.44		0.04	5.3											
				11.0		82.75	0.20	0.35		0.35		0.35		0.04	4.5		11.0		82.79	0.20	0.51		0.51		0.51		0.05	4.5											
				11.5		82.65	0.30	0.69		0.69		0.69		0.10	4.3		11.5		82.79	0.20	0.69		0.69		0.69		0.07	4.3											
				12.0		82.75	0.20	0.75		0.75		0.75		0.08	4.3		12.0		82.69	0.30	1.08		1.08		1.08		0.16	4.3											
				12.5		82.70	0.25	0.62		0.62		0.62		0.08	3.4		12.5		82.69	0.30	1.33		1.33		1.33		0.20	3.4											
				13.0		82.65	0.30	0.00		0.00		0.00		0.00	3.3		13.0		82.74	0.25	0.13		0.13		0.13		0.02	3.3											
				13.5		82.55	0.40	0.00		0.00		0.00		0.00	3.5		13.5		82.79	0.20	0.15		0.15		0.15		0.02	3.5											
				14.0		82.50	0.45	0.55		0.55		0.55		0.12	5.3		14.0		82.59	0.40	0.38		0.38		0.38		0.08	5.3											
				14.5		82.45	0.50	0.00		0.00		0.00		0.00	5.3		14.5		82.64	0.35	0.75		0.75		0.75		0.13	5.3											
				15.0		82.65	0.30	0.53		0.53		0.53		0.08	6.5		15.0		82.44	0.55	1.38		1.38		1.38		0.38	6.5											
				15.5		82.65	0.30	0.88		0.88		0.88		0.13	6.5		15.5		82.39	0.60	0.91		0.91		0.91		0.27	6.5											
				16.0		82.75	0.20	0.11		0.11		0.11		0.01	6.5		16.0		82.29	0.70	0.70		0.70		0.70		0.25	6.5											
				16.5		82.90	0.05	0.00		0.00		0.00		0.00	6.6		16.5		82.64	0.35	0.85		0.85		0.85		0.15	6.6											
			RWE	17.3	22.95	82.95	0.00	0.00		0.00		0.00		0.00	5.1		17.0		82.69	0.30	0.48		0.48		0.48		0.07	5.1											
				19.0	21.90	84.00									1.1	REW	17.5		82.96	0.03	0.00		0.00		0.00		0.00	5.1											
				26.0	21.00	84.90									1.1	RWP	35.2										1.1											
				30.0	19.80	86.10									1.1																							
			RWP	35.4	17.90	88.00									1.1																							



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         Deming Creek SP17 04/10/91
RUN                          MID                                    TRANSECT
IOC       1101100000001000100000
QARD  0.84
QARD  1.00
QARD  1.10
QARD  1.20
QARD  1.30
QARD  1.40
QARD  1.50
QARD  1.60
QARD  1.70
QARD  1.75
QARD  1.80
QARD  1.90
QARD  2.00
QARD  2.20
QARD  2.50
QARD  2.80
QARD  3.20
QARD  3.70
QARD  4.30
QARD  5.00
QARD  6.00
QARD  7.00
QARD  8.50
QARD  10.0
QARD  12.0
QARD  15.0
QARD  18.0
QARD  21.0
QARD  24.0
QARD  26.9
XSEC1000.0      0.00 1.0     82.21   0.0394
    1000.0  0.086.60  3.084.80  5.382.80  5.582.51  6.082.46  6.582.21
    1000.0  7.082.16  7.582.21  8.081.96  8.581.91  9.082.36  9.582.21
    1000.0 10.082.01 10.581.91 11.082.01 11.582.41 12.082.46 12.382.51
    1000.0 17.084.00 23.084.10 29.487.10
NS  1000.0       1.1       1.1       1.1 0.3   1.1 0.27  6.6       6.5
NS  1000.0       6.5       6.5       6.5       5.3 .09   6.5       6.5
NS  1000.0 0.35  5.3       5.3       5.3       5.4 0.26  6.3 0.3   6.3
NS  1000.0       1.1       1.1       1.1
CAL11000.0     82.51      1.75
VEL11000.0              9 0.000.001 0.49 0.34 0.73 1.03 0.82 1.38 1.11
VEL11000.0 0.22 0.72 0.80 0.270.001 0.00
CAL21000.0     82.45      0.84
VEL21000.0
VEL21000.0
CAL31000.0     83.46      26.9
VEL31000.0
VEL31000.0
ENDJ
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         Deming Creek SP17 04/10/91
RUN                          MID                                    TRANSECT
IOC       1101100000001000100000
QARD  0.84
QARD  1.00
QARD  1.10
QARD  1.20
QARD  1.30
QARD  1.40
QARD  1.50
QARD  1.60
QARD  1.70
QARD  1.75
QARD  1.80
QARD  1.90
QARD  2.00
QARD  2.20
QARD  2.50
QARD  2.80
QARD  3.20
QARD  3.70
QARD  4.30
QARD  5.00
QARD  6.00
QARD  7.00
QARD  8.50
QARD  10.0
QARD  12.0
QARD  15.0
QARD  18.0
QARD  21.0
QARD  24.0
QARD  26.9
XSEC1000.0      0.00 1.0     82.51   0.0394
    1000.0  0.086.80  4.086.30  8.582.54  9.082.34  9.582.44 10.082.34
    1000.0 10.582.49 11.082.54 11.582.73 12.082.54 12.582.59 13.082.69
    1000.0 13.582.49 14.082.44 14.582.29 15.082.24 15.582.72 16.082.72
    1000.0 16.582.72 16.982.74 18.083.60 26.084.30 34.887.40 39.096.20
NS  1000.0       1.1       1.1       7.6 .2    7.7 .15   5.6       6.6
NS  1000.0 .2    6.7       6.7 .08   6.7       6.6 .06   6.6 .06   6.6
NS  1000.0 .2    6.7 .28   6.6       6.6       6.6 .15   6.6 .215  6.5
NS  1000.0       6.5       6.5       1.1       1.1       1.1       1.1
CAL11000.0     82.74      1.75
VEL11000.0          0.001 0.031.030 1.38-0.09 1.53 0.10 1.48 2.10 1.00
VEL11000.0 0.44 0.38 1.24 1.500.1000.001 0.10 0.00
CAL21000.0     82.69      0.84
VEL21000.0
VEL21000.0
CAL31000.0     83.59      26.9
VEL31000.0
VEL31000.0
ENDJ
```

```
         Deming Creek SP17 04/10/91
RUN                          MID                                    TRANSECT 3
IOC       1101100000001000100000
QARD  0.84
QARD  1.00
QARD  1.10
QARD  1.20
QARD  1.30
QARD  1.40
QARD  1.50
QARD  1.60
QARD  1.70
QARD  1.75
QARD  1.80
QARD  1.90
QARD  2.00
QARD  2.20
QARD  2.50
QARD  2.80
QARD  3.20
QARD  3.70
QARD  4.30
QARD  5.00
QARD  6.00
QARD  7.00
QARD  8.50
QARD  10.0
QARD  12.0
QARD  15.0
QARD  18.0
QARD  21.0
QARD  24.0
QARD  26.9
XSEC1000.0      0.00 1.0     82.81   0.0394
    1000.0  0.086.30  6.084.70  7.782.99  8.582.89  9.082.79  9.582.69
    1000.0 10.082.69 10.582.79 11.082.79 11.582.79 12.082.69 12.582.69
    1000.0 13.082.74 13.582.79 14.082.59 14.582.64 15.082.44 15.582.39
    1000.0 16.082.29 16.582.64 17.082.69 17.582.96 19.084.00 26.084.90
    1000.0 30.086.10 35.488.00
NS  1000.0       1.1       1.1 .6    1.1 .6    1.3 .4    1.3       1.3
NS  1000.0 .30   5.3       5.3       4.5       4.3       4.3 .105  3.4
NS  1000.0 .3    3.3 .2    3.5 .25   5.3       5.3       6.5       6.5
NS  1000.0       6.5       6.6       5.1 .3    5.1       1.1       1.1
NS  1000.0       1.1       1.1
CAL11000.0     82.99      1.75
VEL11000.0           0.000.001 0.18 0.67 0.37 0.44 0.51 0.69 1.08 1.33
VEL11000.0 0.13 0.15 0.38 0.75 1.38 0.91 0.70 0.85 0.480.001
VEL11000.0
CAL21000.0     82.95      0.84
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0     83.86      26.9
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ
```